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BELL, BOYD & LLOYD, LLP
P. O. BOX 1135
CHICAGO, IL 60690

EXAMINER	
BERNARD, VUI	

ART UNIT	PAPER NUMBER
1792	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/796,527	MORI ET AL.	
	Examiner	Art Unit	
	VIJI N. BERNARD	1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11/25/2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11,14-16 and 18-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11,14-16 and 18-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *03/09/2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/02/2007*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 11, 14, 20, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S Patent. No: 5,695,564 to Imahashi in view of JP 10-214682 to Tanamura et al and further in view of U.S Patent. No: 4,492,180 to Martin.

Imahashi disclose :

Regarding Claim 11, Referring to (Fig. 1, 2, 8, 9, 10) an apparatus manufacturing an organic electroluminescence display (LCD substrate), the organic electroluminescence display having a substrate, a first electrode layer formed on the substrate, an organic layer including a plurality of organic material layers stacked on the first electrode layer in a predetermined pattern and a second electrode layer formed on the organic layer (Col. 1,

Line 11-14 teach that semiconductor wafer and LCD substrates, are repeatedly subjected to a plurality of processing steps such as film formation steps, so there is different layers of film formation over the substrate), the apparartus comprising:

a first alignment mechanism (Fig. 8, U3a, interconnection unit, Col.7, Line 2-9 teach that each of the interconnection units U3 and U7 not only functions to temporarily store the wafers W between the two transfer units U2, but can function to perform a test, temperature regulation, heat treatment, alignment, etc., so the alignment may be aligning, attaching or separating the mask and the substrate or aligning the substrate or positioning the substrate. It is to perform designated function) for aligning a mask, having openings corresponding to the predetermined pattern, to the substrate and for detachably attaching the mask and the substrate;

a first formation unit (U1a, large process unit, U2a, transfer unit, U3a, interconnection unit/alignment unit, U4a, in/out unit, U5 in Fig.2, small processing unit are all called first formation unit) including a plurality of vacuum processing chambers (U2a, U3a, U4a, U5) for sequentially forming the plurality of organic material layers on the substrate at a first color position, the substrate being attached to the mask; and a second alignment mechanism (U3b) for changing the alignment between the substrate and the mask, and for detachably attaching the substrate and the mask again; and

a second formation unit (U1b, large process unit, U2b, transfer unit, U3b, interconnection unit/alignment unit, U4b, in/out unit, U5 in Fig.2, small processing unit are all called second formation unit) including a plurality of vacuum processing chambers

for sequentially forming the plurality of organic material layers on the substrate at a second color position, the substrate being attached to the mask,

wherein each of the vacuum processing chambers correspond to each of the organic material layers (Col. 6, Line 4-8), and

wherein the second alignment mechanism (U3b) is provided to connect the first formation unit (U1a) and the second formation unit (U1b) in series thereby providing flow-through processing,

Regarding Claim 20, a loading unit (U4a, in/out units) including a plurality of processing chambers, the plurality of processing chambers including the first alignment chamber (U3a), wherein the loading unit (U4, U8) is connected in series with the first formation unit (U1a) by a transfer chamber (U2a, U2b, U2c, U2d, transfer units), thereby providing flow-through processing and

Regarding Claim 21, a third formation unit (U1c) including a plurality of vacuum processing chambers (to each large process chambers, any number of process chambers whether it is small or large can be connected via gate) for sequentially forming the organic material layers on the substrate at a third color position, the substrate being attached to the mask; and

a third alignment chamber (U3c) connecting the second formation unit (U1b) to the third formation unit (U1c);

wherein the first formation unit (U1a), the second alignment chamber (U3b), the second formation unit (U1b), the third alignment chamber (U3c), and the third formation unit (U1c) are connected in series (Fig. 8) (a multi chamber processing system includes

plurality of process chambers (film formation unit (large processing units), small processing units, transfer units loading/unloading (U4, U8, in/out unit) and alignment chambers) are connected in series (Fig. 1, 2, 8, 9, 10) (U1 (U1a, U1b, U1c, U1d), U5, process units/1st, 2nd, 3rd, 4th film formation units, U2 (U2a, U2b, U2c, U2d), U6, transfer units, U3 (U3a, U3b, U3c), U7, a linear interconnection unit/1st, 2nd, 3rd alignment unit, U4 (U4a, U4b), U8, wafer storing in/out units or 1st, 2nd loading/unloading units) (Col. 1, Line 10-15, Col. 2, Line 24-27, Line 40-41, Line 60-67, Col. 3, Line 20-30, Line 55-60, Col. 4, Line 55-67, Col. 5, Line 1-10, Line 63-67, Col. 6, Line 1-67, Col. 7, Line 1-9, Col. 9, Line 36-59)).

Imahashi does not disclose :

Regarding Claim 11, an apparatus manufacturing an organic electroluminescence display, the organic electroluminescence display having a substrate, a first electrode layer formed on the substrate, an organic layer including a plurality of organic material layers stacked on the first electrode layer in a predetermined pattern and a second electrode layer formed on the organic layer,

a first alignment mechanism for aligning a mask, having openings corresponding to the predetermined pattern, to the substrate and for detachably attaching the mask and the substrate.

Wherein the organic material layer include a hole injection layer, a hole transfer layer, and a light emitting layer formed in a predetermined pattern and at predetermined thicknesses for each emitting color, and

Wherein a thickness of at least one of the hole injection layer and the hole transfer layer varies with respect to a color of light emitted from the associated light emitting

layer.

Tanamura et al disclose :

Referring to (Drawing 1-5), manufacturing an organic electroluminescence display, the organic electroluminescence display having a substrate (1), a first electrode layer (2, anode layer) formed on the substrate (1, an organic layer including a plurality of organic material layers (3a-c) (Page 4, Paragraph 0023) stacked on the first electrode layer in a predetermined pattern and a second electrode layer (4, cathode layer) formed on the organic layer (3c), the apparartus comprising:

a first alignment mechanism (In the transfer chamber, Tanamura et al discloses a procedure mechanism for aligning/installing the mask and the substrate, Page 9, Paragraph 0071) for aligning a mask, having openings corresponding to the predetermined pattern, to the substrate (1) and for detachably attaching the mask and the substrate (Drawing (4)); Tanamura et al teach a first formation unit (22-26, operating vacuum chambers have linear arrangement, but linear arrangement can be modified to cluster tool by connecting more chambers on all sides of transfer chamber via gate) including a plurality of vacuum processing chambers (22-26) for sequentially forming the organic material layers on the substrate at a first color position, the substrate being attached to the mask.

installing/reinstalling/aligning/realigning the substrate on the metal mask, but the alignment chamber is not shown in the diagram. And each of the vacuum processing chambers correspond to each of the organic material layers (Page 9-11, Paragraph 0070-0080). A second and third formation units are also not shown but if you have one set of

film formation unit (includes process chambers, alignment chambers, transfer chambers, load lock/unload lock chambers etc.,), it is possible to connect many units in series. It is just mere duplication of parts.

the first and second formation units include a plurality of vacuum processing chambers for forming a hole injection layer, a hole transfer layer, and a light emitting layer on the substrate at a first color position and each of the hole injection layer (3c), the hole transfer layer (3a), and a light emitting layer (3, organic luminous layer in Drawing 2) formed in a predetermined pattern and at predetermined thickness for each emitting color and Wherein a thickness of at least one of the hole injection layer and the hole transfer layer varies with respect to a color of light emitted from the associated light emitting layer (Page 6, Paragraph 0045, 0046, 0049 teaches thickness of different layers like electron transfer layer, protective layer etc.,) (Page 9-10, Paragraph 0071-0075)

The motivation for having an apparatus manufacturing an organic electroluminescence display, the organic electroluminescence display having a substrate, a first electrode layer formed on the substrate, an organic layer including a plurality of organic material layers stacked on the first electrode layer in a predetermined pattern and a second electrode layer formed on the organic layer, and wherein the organic material layer include a hole injection layer, a hole transfer layer, and a light emitting layer formed in a predetermined pattern and at predetermined thicknesses for each emitting color, and Wherein a thickness of at least one of the hole injection layer and the hole transfer layer varies with respect to a color of light emitted from the associated light emitting layer is to prevent respective layer-shaped deposits from contacting with

moisture and oxygen in the atmosphere, and inexpensively manufacture an organic electroluminescence element excellent in a light emitting service as taught by Tanamura et al (Abstract).

The thickness of at least one of the hole injection layer and the hole transfer layer varies with respect to a color of light emitted from the associated light emitting layer is optimizable.

Furthermore, it was held in *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984), by the Federal Circuit that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device. (Also see MPEP 2144.04 (IV)(A))

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicant's claimed invention was made to have provided the above features in the apparatus of Imahashi as taught by Tanamura et al.

Imahashi and Tanamura et al does not disclose :

a first alignment mechanism for aligning a mask, having openings corresponding to the predetermined pattern, to the substrate and for detachably attaching the mask and the substrate.

However, Matin teach that a first alignment mechanism for aligning a mask, having openings corresponding to the predetermined pattern, to the substrate and for detachably attaching the mask (30, 32) and the substrate (64) for the purpose of indexing and accurate registering the substrate to the deposition mask and minimizing the effects

of contraction, expansion and warpage of the mask and the substrate as taught by Martin (Abstract, Col.4, Line 30-35, Col. 7, Line 56-68, Col. 8, Line 1-67, Col. 9, Line 1-3) (Fig. 1-10).

Thus, it would have been obvious to one of ordinary skill in the art at the time applicant's claimed invention was made to have provided a first alignment mechanism for aligning a mask, having openings corresponding to the predetermined patter, to the substrate and for detachably attaching the mask and the substrate in Imahashi and Tanamura et al as taught by Martin.

Second alignment mechanism, Second formation unit, Third alignment mechanism, Third formation unit are directed to duplication of parts.

The mere duplication of parts has no patentable significance unless a new and unexpected result is produced. In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

Regarding Claim 14, Referring to (Fig. 1, 2, 8, 9, 10) Imahashi teaches a vacuum transfer chamber (U3 (U3a, U3b, U3c) connecting the vacuum processing chambers U1 (U1a, U1b, U1c, U1d), U5, process units), wherein the transferring mechanism (12) (Robot) is arranged in the vacuum transfer chamber.

Claims 15, 16, 18, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S Patent. No: 5,695,564 to Imahashi in view of JP 10-214682 to Tanamura et al in view of U.S Patent. No: 4,492,180 to Martin as applied to claims 11, 14, 20, 21 above, and in view of U.S Pub. No: 2001/0006827 A1 to Yamazaki et al.

Imahashi, Tanamura et al and Martin does not disclose :

Regarding Claim 15, an attachment fixture for attaching the substrate and the

mask.

Regarding Claim 16, the mask is formed of a magnetic material, and the attachment fixture is provided with a contact surface fully contacting a non-film formation surface side of the substrate, has at least the contact surface formed of a plate-shaped magnet, and has the substrate sandwiched between the mask and the contact surface attached with the mask by a magnetic force of the magnet.

Regarding Claim 18, a separating mechanism for separating the mask and the substrate after forming the second organic layer; and

a vacuum chamber for forming the second electrode layer on the substrate separated from the mask so as to cover the first and second organic layers.

Regarding Claim 19, the first and second alignment mechanisms comprise a mask support member configured to support the mask, a substrate support member configured to support the substrate, an attachment fixture support member configured to support the attachment fixture, and a movement mechanism for changing relative positions between the mask support member, the substrate support member, and the attachment fixture support member, whereby the mask and the substrate are aligned, attached, or separated.

Yamazaki et al disclose :

Regarding Claim 15, an attachment fixture for attaching the substrate and the mask and the mask is formed of a magnetic material (Page 2,3, Paragraph 0035 teach that an electromagnetic alignment mechanism comprises a mask support member (207) (Fig 2A, 2B), a substrate support member (204), an attachment fixture support member (electromagnetic field) and a movement mechanism (205a - conveyor rail).

Regarding Claim 16, the mask is formed of a magnetic material, and the attachment fixture is provided with a contact surface fully contacting a non-film formation surface side of the substrate (see Fig.2B), has at least the contact surface

formed of a plate-shaped magnet, and has the substrate sandwiched between the mask and the contact surface attached with the mask by a magnetic force of the magnet (an electromagnet (210) (Fig 2B) is disposed over the substrate and the substrate is set in a substrate holder (204) and shadow mask (208) is made of metallic material and is fixed to a mask holder.

Regarding Claim 18, the alignment mechanism provided in Yamazaki et al as described above can be used as alignment or separating mechanism. Also, it can be placed in any transfer chamber including a transfer chamber connected to a vacuum processing chamber for depositing an anode or cathode.

a vacuum chamber connected to a transfer chamber for depositing anode and cathode layer, Yamazaki teaches without a mask (Page 4, Paragraph 0051).

Regarding Claim 19, the first and second alignment mechanisms comprise a mask support member (207) (Fig 2A, 2B), configured to support the mask, a substrate support member (204) configured to support the substrate, an attachment fixture support member (electromagnetic field) configured to support the attachment fixture, and a movement mechanism (205a - conveyor rail) for changing relative positions between the mask support member, the substrate support member, and the attachment fixture support member (Page 2, 3, Paragraph 0035).

Regarding Claim 15, the motivation for having an attachment fixture for attaching the substrate and the mask is to align a substrate and mask without warping as taught by Yamazaki et al.

Regarding Claim 16, the motivation for having the mask is formed of a magnetic material, and the attachment fixture is provided with a contact surface fully contacting a non-film formation surface side of the substrate, has at least the contact surface formed of a plate-shaped magnet, and has the substrate sandwiched between the mask and the contact surface attached with the mask by a magnetic force of the magnet is to form a

magnetic field by the electromagnet, and the shadow mask is drawn to the substrate so as to maintain a predetermined gap as taught by Yamazaki et al (Page 2, Paragraph 0034)).

Regarding Claim 18, the motivation for having the alignment mechanism is to align or separate substrate and the mask and transfer chamber including a transfer chamber connected to a vacuum processing chamber for depositing an anode or cathode layers (Page 4, Paragraph 0051).

Regarding Claim 19, the motivation for having a mask support member, a substrate support member, an attachment fixture support member and a movement mechanism is to align a mask and the substrate without warping (Page 2, 3, Paragraph 0035).

Thus, it would have been obvious to one of ordinary skill in the art at the time applicant's claimed invention was made to have provided an attachment fixture for attaching the substrate and the mask and the mask is formed of a magnetic material, and the attachment fixture is provided with a contact surface fully contacting a non-film formation surface side of the substrate, has at least the contact surface formed of a plate-shaped magnet, and has the substrate sandwiched between the mask and the contact surface attached with the mask by a magnetic force of the magnet and a mask support member, a substrate support member, an attachment fixture support member and a movement mechanism in the apparatus of Imahashi, Tanamura et al and Martin as taught by Yamazaki et al.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S Patent. No: 5,695,564 to Imahashi in view of JP 10-214682 to Tanamura et al as applied to claims 11, 14, 20, 21 above, and in view of U.S Patent. No: 6,214,631 B1 to Burrows et al.

Imahashi, Tanamura et al and Martin does not disclose :

Regarding Claim 19, the first and second alignment mechanisms comprise a mask support member configured to support the mask, a substrate support member configured to support the substrate, an attachment fixture support member configured to support the attachment fixture, and a movement mechanism for changing relative positions between the mask support member, the substrate support member, and the attachment fixture support member, whereby the mask and the substrate are aligned, attached, or separated.

Burrows et al disclose :

Regarding Claim 19, a shadow mask is positioned in a first position over a substrate. A first process is performed on the substrate through the shadow mask. After the first process is performed, the shadow mask is moved to a second position over the substrate, measured relative to the first position. After the shadow mask is moved to the second positon, a second process is performed on the substrate through the shadow mask and the mechanisms used to align the mask and the substrate are piezo electric materials and x-y translators may be used to achieve such movement. Measuring the second position relative to the first position advantageously avoids the effort and cost of performing a second alignment relative to features on the substrate.

The motivation for having the first and second alignment mechanisms comprise a mask support member configured to support the mask, a substrate support member configured to support the substrate, an attachment fixture support member configured to support the attachment fixture, and a movement mechanism for changing relative positions between the mask support member, the substrate support member, and the attachment fixture support member, whereby the mask and the substrate are aligned, attached, or separated is to deposit a number of layers onto a substrate having similar but

not identical shapes and sizes from a direction approximately perpendicular to the substrate, with out changing the angle from which uniform deposition occurs as taught by Burrows et al (Abstract and Col.3, Line 15-46) (Fig. 1-17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to modify the apparatus of Imahashi, Tanamura et al and Martin so as to include an electromagnet, a mask support member and a mask support member, an attachment fixture support member and a movement mechanism as taught by Burrows et al.

Response to Arguments

Applicant's arguments filed 01/25/2008 have been fully considered but are not persuasive.

Applicant argued that "Applicants respectfully submit that Imahashi, Tanamura and Martin do not teach or suggest the features of the presently claimed invention, even assuming that they are properly combinable. For example, the references do not disclose or suggest varying the thickness of at least one of the organic material layers with respect to a color of light emitted, as recited in amended claim 11".

Applicant's arguments are not persuasive because this is an apparatus case and varying the thickness of at least one of the organic material layers with respect to a color of light emitted are optimizable and are directed to case law.

Furthermore, it was held in *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984), by the Federal Circuit that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device. (Also see MPEP 2144.04

(IV)(A)).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent No: 6,132,280, U.S. Patent No: 6,776,880 B1 and U.S. Pub No: 2005/0005850 A1 discloses multiple chambers, U.S. Patent No: 5,259,881 discloses wafer processing cluster tool with alignment chamber, EP 1035576 A2 discloses a processing method of silicon epitaxial growth and a processing apparatus including an alignment chamber.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Viji N. Bernard whose telephone number is 571-272-6425. The examiner can normally be reached on Mon-Fri 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, Primary Examiner, Jeffrie R. Lund can be reached on 571-272-1437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeffrie R. Lund/
Primary Examiner, Art Unit 1792

Viji Bernard
Examiner
Art Unit 1792

Jeffrie R. Lund
Primary Examiner
Art Unit 1792